Notice of Allowability	Application No.	Applicant(s)
	10/058,236	MURAKAMI, AKIRA
	Examiner	Art Unit
	Carlos Lopez	1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to *2/7 and 4/27 of 2007*.

2. ☒ The allowed claim(s) is/are *1-26*.

3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
   a) ☐ All b) ☐ Some* c) ☐ None of the:
      1. ☐ Certified copies of the priority documents have been received.
      2. ☐ Certified copies of the priority documents have been received in Application No. _____ .
      3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

   * Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.

5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
   (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
      1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
   (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.

   Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).

6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☒ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413), Paper No./Mail Date *4/27/07* .
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

EXAMINER'S AMENDMENT

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Arthur Crawford on 4/27/07.

The application has been amended as follows:

The title was amended as follows:

Methods for Producing Substrate Blank~~, substrate and information recording medium~~

The claims were amended as follows:

1. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank at least having no notch portion and the surrounding edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one

molding surface of the mold, and

provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

2. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank having flat front and reverse surfaces and a surface formed of the surrounding edge portion and the surrounding edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one molding surface of the mold, and provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

3. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank having a thickness whose minimum value is greater than the maximum value of thickness of a glass substrate to be obtained from said substrate blank and the surrounding edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one molding surface of the mold, and
provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

4. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce the substrate blank having the form of a thin plate, wherein a gob as a raw material for the blank is supplied into a lower mold

member while it is in a molten state, the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding, to produce the substrate blank having a large-thickness portion and a small-thickness portion whose thickness is the smallest, the small-thickness portion having a larger area than the large-thickness portion and the surrounding edge portion having a free surface, provided that at least one surrounding edge portion of the glass blank does not come into contact with at least one molding surface of the mold, and
provided that the upper surface of the produced substrate blank is released from the upper mold member before the produced substrate blank is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

14. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises
press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article blank having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then cooling the molded article to produce the substrate blank at least having no notch portion and the surrounding edge portion having a free surface provided that the upper surface of the molded article is released from the upper mold member before the molded article is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

15. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises

press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then

cooling the molded article to produce the substrate blank having flat front and reverse surfaces and a surface formed of the surrounding edge portion and the surrounding edge portion having a free surface,

provided that the upper surface of the molded article is released from the upper mold member before tile molded article is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

16. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises

press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then

cooling the molded article to produce the substrate blank having a thickness whose minimum value is greater than the maximum value of thickness of a glass substrate to be obtained from said substrate blank and the surrounding edge portion having a free surface,

provided that the upper surface of the molded article is released from the upper mold member before the molded article is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

17. (Currently Amended) A method for producing a substrate blank that is an intermediate for a flat substrate, which comprises

press-molding a glass in a softened state with a mold having an upper mold member and a lower mold member to produce a molded article having the form of a thin plate, wherein the glass in a softened state is press-molded without causing any surrounding edge portion of the blank under the production to come into contact with the mold members or parts used in the press molding,

releasing the upper surface of the molded article from the upper mold member and mold parts, then

cooling the molded article to produce the substrate blank having a large-thickness portion and a small-thickness portion whose thickness is the smallest, the small-thickness portion having a larger area than the large-thickness portion and the surrounding edge portion having a free surface,

provided that the upper surface of the molded article is released from the upper mold member before the molded article is cooled to a temperature ~~around~~ **at** or lower than the glass transition temperature.

REASONS FOR ALLOWANCE

The following is an examiner's statement of reasons for allowance: the primary reason for allowance is that the cited prior art fails to disclose or reasonably suggest a method of producing a substrate blank having the claimed step of molding the glass without the surrounding edge touching a mold or mold part in combination with .

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

CONCLUSION

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

CL Primary Examiner